UTILITY PATENT APPLICATION

	Memory					
Title	Column Redundancy For Digital Multilevel Nonvolatile					
First Inventor		Hieu Van Tran				
Attom	ey Docket No.	2102397-991400				
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(Only for new nonprovisional applications under 37 CFF	₹ 1.53(b)) [Express Mail Label No. EV 301143879 US				
APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent applic	Assistant Commissioner for Patents ADDRESS Mail Stop Patent Application P.O. Box 1450 Alexandria, VA 22313-1450					
Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original, and a duplicate for fee processin Applicant claims small entity status. See 37 CFR 1.27. Specification [Total Pages: 8 (preferred arrangement set forth below) - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R&D - Reference to sequence listing, a table or a computer program listing appendix - Background of the Invention - Brief Description of the Drawings(if filed) - Detailed description - Claim(s) - Abstract of the Disclosure 4. Drawing(s) (35 U.S.C. 113) [Total Sheets 29] 5. Oath or Declaration and Power of Attorney [Total Sheets 29] Copy from a prior application (37 Claims) - Copy from a prior application (37 Claims)	7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies; or ii. paper c. Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS 9. Assignment Papers (cover sheet & document(s)) 10. Assignment Papers (cover sheet & document(s)) 11. English Translation Document (if applicable) 12. Information Disclosure Statement (IDS)/PTO-1449 13. Preliminary Amendment 14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized) Certified Copy of Priority Document(s) (if foreign priority is claimed)					
Signed statement attached delenamed in the prior application, 1.63(d)(2) and 1.33(b).	ating inventor(s see 37 CFR	(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.				
6 Application Data Sheet. See 37 CFR 1.76.		17. Other: Check No. <u>54/4/3</u> (\$2,596.00)				
17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Of prior application No.: Prior application information: Examiner Group/Art Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.						
		NUMBER ADDRESS				
Customer Number 26379	lanesh Crintomar hin	or Correspondence address below				
Name Edward B. Weller						
Address Gray Cary Ware & Freide 2000 University Avenue	nrich					
City East Palo Alto S	CA Zip Code 94303-2248					
Country US Te	elephone	650/833-2436 Fax 650/833-2001				
NAME (Print/Type) Edward B. Weller Signature	Regis	Stration No. (Attorney/Agent) 37,468				

Approved for use through 04/30/2003. OMB 0651-0032

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u.s	FEE TRANSMITTAL	Application Numb
.	for FY 2003	Filing Date
₹ĕ	Effective 01/01/2003, Patent fees are subject to annual revision.	First Named Inve
Ŧ ¯_		Examiner Name
	Applicant claims small entity status. See 37 CFR 1.27	Art Unit

(\$) 2,596.00

TOTAL AMOUNT OF PAYMENT

Complete if Known					
Application Number	Not yet assigned				
Filing Date	July 28, 2003				
First Named Inventor	Hieu Van Tran				
Examiner Name	Not yet assigned				
Art Unit	Not yet assigned				
Attorney Docket No.	2102397-991400				

METHOD OF PAYMENT (check all that apply)					FEE CALCULATION (continued)						
	☐ Credit		Money Dther	None		3. ADDITIONAL FEES					
Deposit	Calu		Order			Large Fee	Entity Fee	Small Fee	Entity Fee	Fee Description	Fee Paid
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Deposit	<u> </u>				- 1	1051	130	2051	65	Surcharge - late filing fee or oath	
Account Name	Gra	ay Car	ry Ware & Freidenrich	LLP		1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
The Commissi	oner is aut	norized	d to: (check all that apply	/y)		1053	130	1053	130	Non-English specification	·
Charge (fee	es) indicated	d below	v. 🛛 Credit any ov	verpayments		1812	2,520	1812	2,520	For filing a request for exparte reexamination	
_ ``	•		during the pendency of th	nis application		1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
☐ Charge fee	e(s) indicated	d below	w, except for filing fee	••		1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
to the above-ide					-	1251	110	2251	55	Extension for reply within first month	
	FI	EE CA	ALCULATION			1252	410	2252	205	Extension for reply within second month	
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Fee Fe Code (\$		Fee (\$)	Fee Description	Fee Paid		1255	1,970	2255	985	Extension for reply within fifth month	
1001 75	·		Utility filing fee	750.00	门	1401	320	2401	160	Notice of Appeal	
1002 33			Design filing fee]	1402	320	2402	160	Filing a brief in support of an appeal	
1003 52			Plant filing fee			1403	280	2403	140	Request for oral hearing	
1004 75 1005 16			Reissue filing fee Provisional filing fee	<u> </u>	41	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1000	•				_	1452	110	2452	55	Petition to revive – unavoidable	
			TOTAL (1) (\$) 750			1453	1,300	2453	650	Petition to revive – unintentional	
2. EXTRA	CLAIM FE	ES F	FOR UTILITY AND R			1501	1,300	2501	650	Utility issue fee (or reissue)	
	ac	_	tra Claims below	Fee Paid	_	1502	470	2502	235	Design issue fee	
Total Claims)** =	77 X 18 05 X 84	= 1,386.00 = 420.00	\dashv [1503	630	2503	315	Plant issue fee	
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Large Enti	ity Small E	ntity	_	_		1806	180	1806	180	Submission of Information Disclosure Stmt	
Fee Fe	e Fee	Fee	Fee Descri	ption		8021	40	8021	40	Recording each patent assignment per	40.00
Code (\$	1	(\$) 9	Claims in excess of	f 20	77	1809	750	2809	375	property (times number of properties) Filing a submission after final rejection	40.00
1202 10		42	Independent daims in		05					(37 ČFR § 1.129(a))	
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1204 8	4 2204	42	** Reissue independer over original patent		-	1801	750	2801	375	Request for Continued Examination (RCE)	
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**or number previously paid, if greater; For Reissues, see above					* Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00						

SUBMITTED BY				Complete(if	applicable)
Name (Print/Type)	EDWARD B. WELLER	Registration No. (Attorney/Agent)	37,468	Telephone	650-833-2436
Signature	ξ.	MELLOSE		Date	July 28, 2003

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included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the includual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

CERTIFICATE C	OF MAILING BY "EX	XPRESS MAIL" (37	CFR 1.10)	Docket No.				
	2102397-991400							
Applicants: Hieu Van Tran, Sakhawat M. Khan, William J. Saiki, and								
	J. Korsh	- ·		A . TT				
_	Serial No. Filing Date Examiner Group A							
Not Yet Assigned	July 28, 2003	Not Yet Assigned		N/A				
Invention:								
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